

# **Ryan Chouest daily data transmission and report**

***Period covered: 1000 hrs 07/04/2010-1000 hrs 07/05/2010***

***122.126 - Nautical miles covered***

## **Vessel science party:**

Xiubin Qi ([Xiubin.Qi@csiro.au](mailto:Xiubin.Qi@csiro.au))

Stephane Armand ([Stephane.Armand@csiro.au](mailto:Stephane.Armand@csiro.au))

Andy Revill ([Andy.Revill@csiro.au](mailto:Andy.Revill@csiro.au))

Charlotte Stalvies ([Charlotte.Stalvies@csiro.au](mailto:Charlotte.Stalvies@csiro.au))

Tosin Majekodunmi ([Tosin.Majekodunmi@bp.com](mailto:Tosin.Majekodunmi@bp.com))

Curtis Walker ([cwalker@entrix.com](mailto:cwalker@entrix.com))

Michael Griffin ([Griffinmi09@students.ecu.edu](mailto:Griffinmi09@students.ecu.edu))

## **Contact details:**

+ 1 337 761 9830 – Sat phone

+ 1 337-761-9830 – Broadband phone ship office 1

+ 1 337-761-9827 – Broadband phone ship office 2

+ 1 337-761-9826 - Broadband phone ship bridge

## **Cruise notes:**

As of 1000 hrs on 07/04/2010, the Ryan Chouest has been heading along the SE track through a thunderstorm that had begun brewing overnight. At 1050 hrs, the CSIRO crew cleaned the sensors and tank. The rain subsided at about 1248 hrs and at 1330 hrs, the underway pump was deployed at 1345 hrs while the Ryan Chouest was at 27°43.30'N and 85°03.09'W. The CSIRO crew purged the long hose, at 1930 hrs, in anticipation of deeper sampling.

Except the Emergency Positioning Indicating Radio Beacon (EPIRB), all means of establishing communication in the event of an emergency were down. This includes the satellite phone on the ship, office phones and e-mail. At 2013, the lead CSIRO scientist and BP representative made the decision to have the Ryan Chouest heading east towards the Florida coast. This decision was primarily driven by safety concerns and the need to report cruise updates to and receive cruise directives from Peter Carragher and Simon Lisiecki. At 0730 hrs on 07/05, the Ryan Chouest finally got to its overnight location (27°09.528'N, 82°47.458'W) and we reached Simon Lisiecki by phone at 0900 hrs.

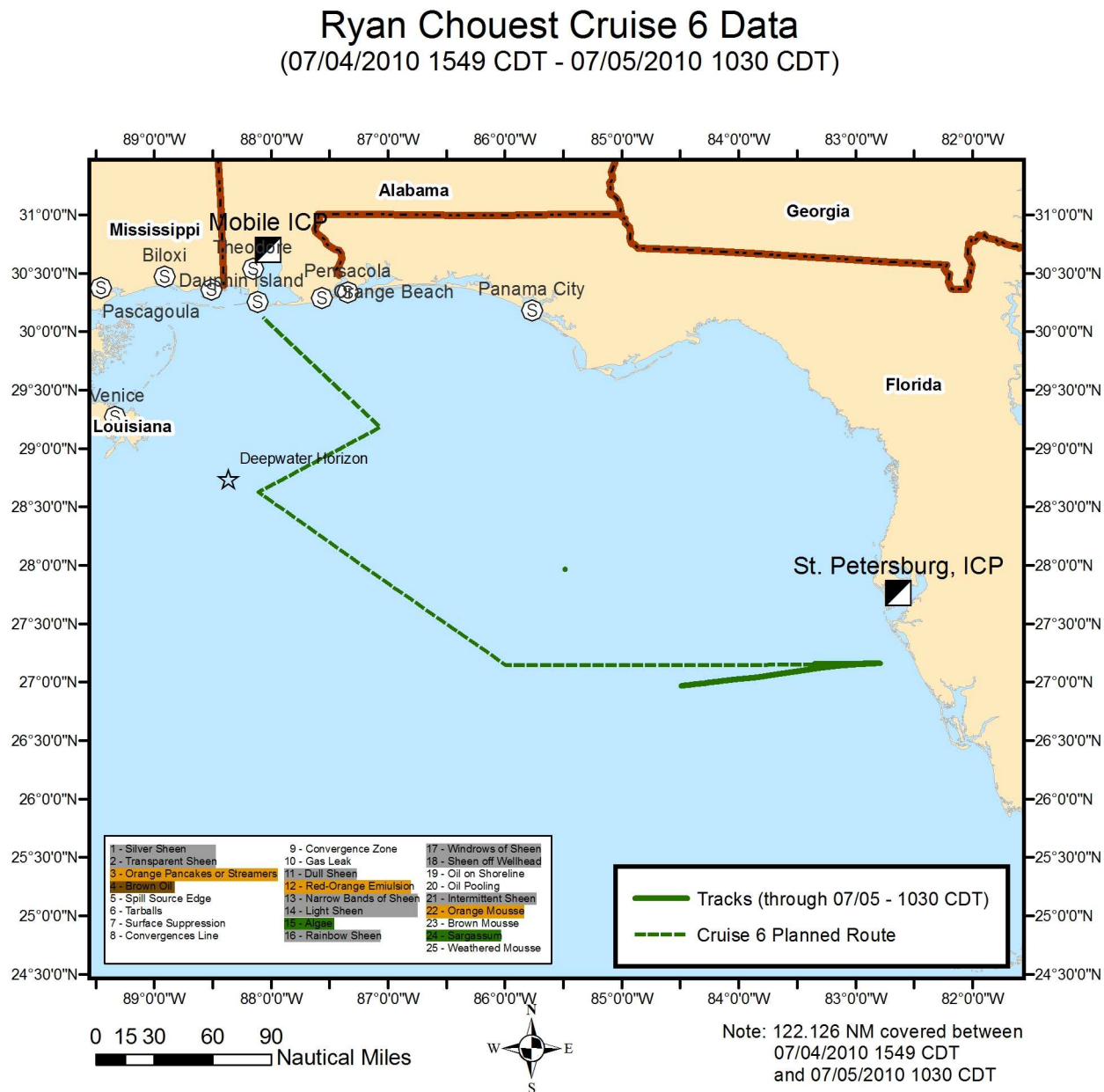
## **Science results and preliminary interpretation:**

### Fluorometry results

Fluorometry results from the Chelsea, Trios, and Contros sensors all show very low level of poly aromatic hydrocarbons. These results indicate that inferred hydrocarbon concentrations over the track covered (Figures 2-4) are extremely low.

## Surface Observations

No significant surface observation with the exception of sparse seaweed and a dolphin spotted at 2028 hrs at 26°58'N and 84°32'W shortly after the Ryan Chouest deviated from the SE track to east towards the Florida Coast in search of re-establishing communication.

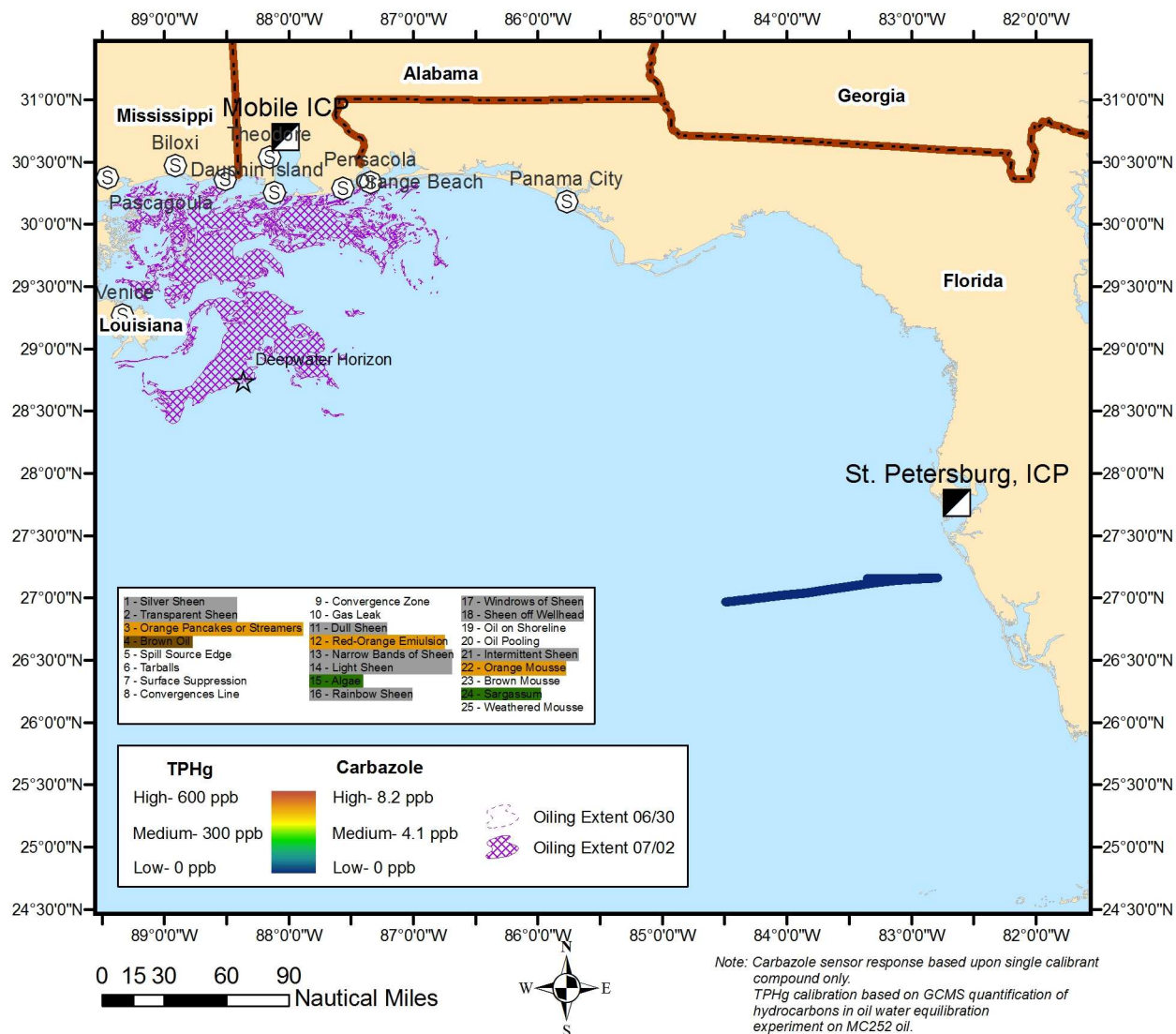


**Figure 1.** Planned course plotted for Cruise 6. Purple shaded area represents outline extent of the slick from 07/02 ERMA composite.

# Ryan Chouest Cruise 6 Data

## Chelsea - Fluorometer

(07/04/2010 1549 CDT - 07/05/2010 1030 CDT)

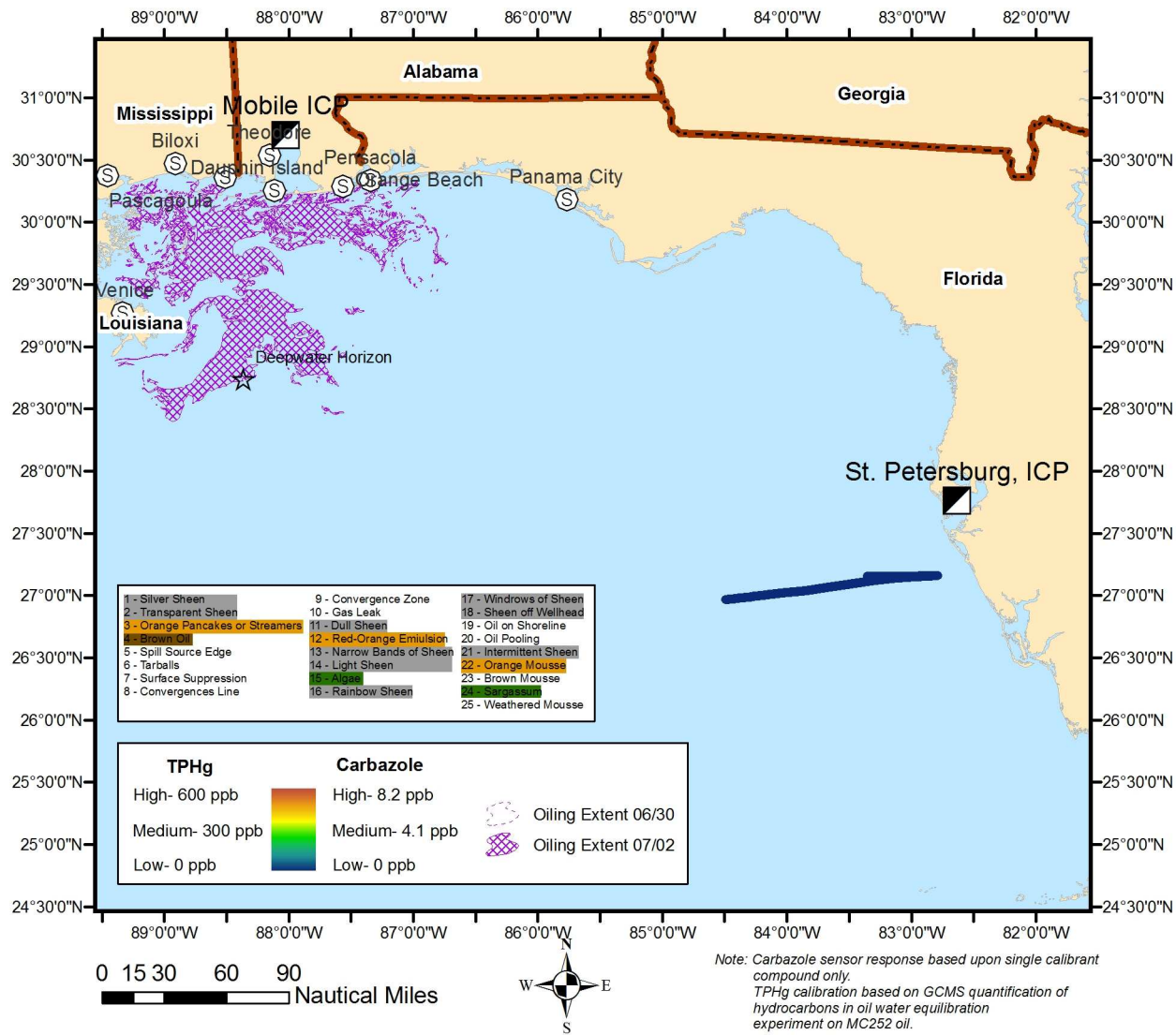


**Figure 2.** Chelsea fluorometer results plotted with location on cruise 6 track.

# Ryan Chouest Cruise 6 Data

## Trios- Fluorometer

(07/04/2010 1549 CDT - 07/05/2010 1030 CDT)

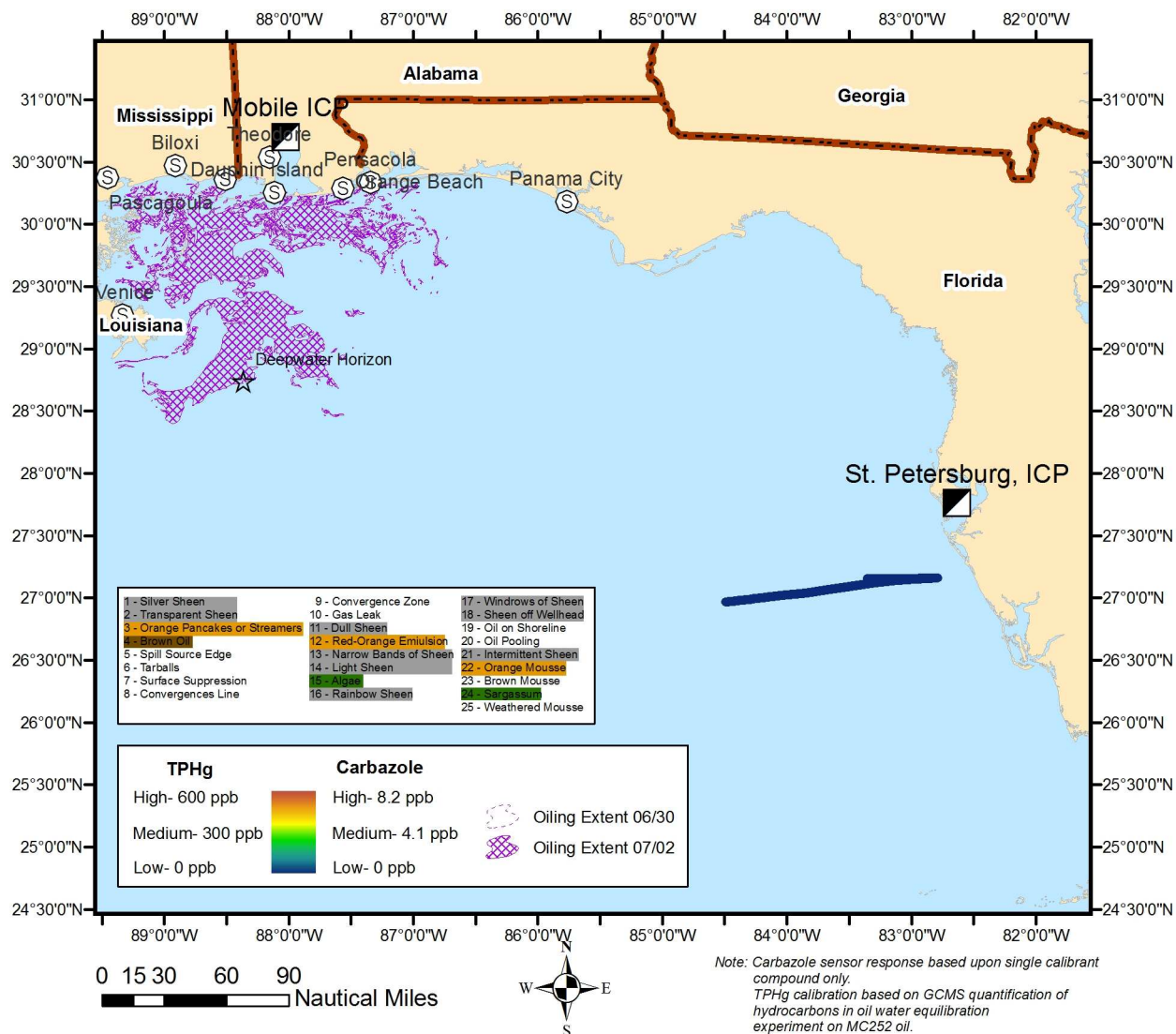


**Figure 3.** Trios fluorometer results plotted with location on cruise 6 track.

# Ryan Chouest Cruise 6 Data

## Contros - Fluorometer

(07/04/2010 1549 CDT - 07/05/2010 1030 CDT)

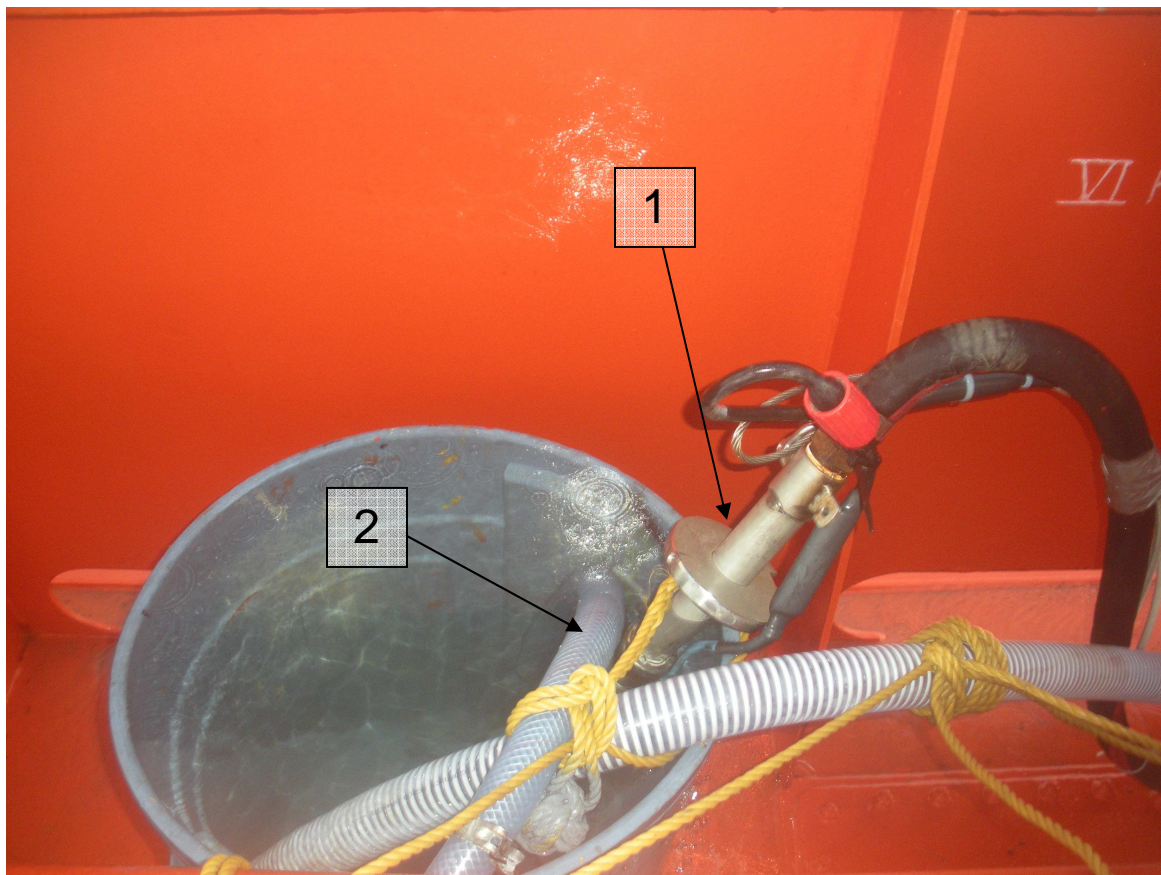


**Figure 4.** Contros fluorometer results plotted with location on cruise 6 track.





**Photo 1.** Chaffed segment of hose covered with plastic tube.



**Photo 2.** The setup for purging the long vertical cast hose. (1) vertical cast pump (2) the outlet hose for the underway pump

### **Problems/operational issues:**

As a result of the thunderstorm, phone and internet were down. Poor visibility made it difficult to observe the surface in detail. At 1315hrs, the CSIRO crew discovered chaffing along a segment of the hose connected to the shallow water pump. This was solved by covering the segment with a plastic pipe (Photo1). The CSIRO GPS broke down and the crew forged ahead by synchronizing navigation information from C&C together with the CSIRO sensor data.

### **Planned activities for next 24 hours:**

Continue with plan to head east towards the coast with hope of getting communication signals in order to provide updates and receive renewed Cruise 6 route.